		Smart Skies	
		2009 Mathemat	ics
		Academic Stand	ards
Nebraska Mathema	tics		
Grade 5			
Activity/Lesson	State	Standards	
			Plot the location of an ordered pair in the first
Fly by Math	NE	MA.5.MA 5.2.2.a	quadrant
Fly by Math	NE	MA.5.MA 5.4.1.a	Represent data using line graphs
			Represent the same set of data in different
<b>[</b> ]	NIE		formats (e.g., table, pictographs, bar graphs, line
Fly by Math	NE	MA.5.MA 5.4.1.b	
Floring NA - 41-	NIE		Generate questions and answers from data sets
Fly by Math	NE	MA.5.MA 5.4.1.6	and their graphical representations
			Identify correct unit (customary or metric) to the
Lina Lina with Math	NIE		measurement situation (e.g., distance from
Line Up with Math	NE	IVIA.5.IVIA 5.2.5.D	home to school; measure length of a room)
Lina I la with Math	NIE	MA E MA E O E o	Estimate and measure length with customary
Line Up with Math	NE	IVIA.5.IVIA 5.2.5.C	units to the nearest ¼ inch
Lina I la with Math	NE	MA	Magazina agraciti / valuma with avatamam unita
Line Up with Math	INE	IVIA.5.IVIA 5.2.5.U	Measure capacity/volume with customary units
Lina Lla with Math	NE	MA.5.MA 5.2.5.e	Measure weight (mass) and temperature using
Line Up with Math	INE	IVIA.5.IVIA 5.2.5.E	metric units
		Smart Skies	
		2009 Mathemat	
		Academic Stand	
Nebraska Mathema	tice	Academic Stand	
Grade 6	1103		
Activity/Lesson	State	Standards	
/ toti vity/ 2000011	Otato	Otaniaa ao	Identify the ordered pair of a plotted point in the
Fly by Math	NE	MA 6 MA 6 2 2 a	coordinate plane
i iy by matri	112	140 1.0.140 ( 0.2.2.2.4	Perform and describe positions and orientation
			of shapes under single transformations
			(translation, rotation, reflection) not on a
Fly by Math	NE	MA.6.MA 6.2.3.a	coordinate plane
i iy by maan	1,12	100 000000 00000	Represent data using stem and leaf plots,
Fly by Math	NE	MA.6.MA 6.4.1.a	histograms, and frequency charts
, .,			Compare and interpret data sets and their
Fly by Math	NE	MA.6.MA 6.4.1.b	graphical representations
, .,			Make predictions based on data and create
			questions to further investigate the quality of the
Fly by Math	NE	MA.6.MA 6.4.2.a	
i iy by maar	1.12	140 40 110 10 112.0	Identify the ordered pair of a plotted point in the
Line Up with Math	NE	MA 6 MA 6 2 2 a	coordinate plane
		511111 ( 5121210	Estimate and measure length with customary
			and metric units to the nearest 1/16 inch and
Line Up with Math	NE	MA.6.MA 6.2.5.a	
o op man maan	1 1 -	1717 (. 0.1717 ( 0.2.0.4	Measure volume/capacity using the metric
	NE	MAGMAGAED	, , , ,
Line Up with Math	IIVI	IVIA DIVIA DIVIA DI	
Line Up with Math	NE	MA.6.MA 6.2.5.b	System

		2009 Mathemat	
		Academic Stand	ards
Nebraska Mathema	tics		
Grade 7			
Activity/Lesson	State	Standards	
			Name line, line segment, ray, and angle (e.g.,
Fly by Math	NE	MA.7.MA 7.2.1.b	"line" AB, "ray" PR "angle" LMN)
			Plot the location of an ordered pair in the
Fly by Math	NE	MA.7.MA 7.2.2.a	coordinate plane
			Identify the quadrant of a given point in the
Fly by Math	NE	MA.7.MA 7.2.2.b	coordinate plane
			Find the distance between points along
			horizontal and vertical lines of a coordinate
-	NE		plane (e.g., what is the distance between (0, 3)
Fly by Math	NE	MA.7.MA 7.2.2.c	
			Perform and describe positions and orientation
			of shapes under a single transformation (e.g.,
Floring Made	NE	NAA 7 NAA 7 O O b	translation, rotation, reflection) on a coordinate
Fly by Math	NE	MA.7.MA 7.2.3.b	
Cly by Moth	NE	MA 7 MA 7 4 1 0	Analyze data sets and interpret their graphical
Fly by Math	INE	MA.7.MA 7.4.1.a	Find and interpret mean, median, mode, and
Ely by Moth	NE	MA 7 MA 7 4 1 b	range for sets of data
Fly by Math	INE	IVIA. 7 . IVIA 7 . 4. 1 . D	List biases that may be created by various data
Fly by Math	NE	MA 7 MA 7 4 1 d	collection processes
riy by ivialii	INC	IVIA.7.IVIA 7.4.1.u	Determine if data collected from a sample can
Fly by Math	NE	MAZMAZAZ	be used to make predictions about a population
I ly by watti	INL	IVIA.7.IVIA 7.4.2.a	Name line, line segment, ray, and angle (e.g.,
Line Up with Math	NE	MA 7 MA 7 2 1 h	"line" AB, "ray" PR "angle" LMN)
Line op with matin	114	1017 (.7 .1017 ( 7 .2.1 .1.0	Identify the quadrant of a given point in the
Line Up with Math	NE	MA 7 MA 7 2 2 b	coordinate plane
Line op with math	112	100 (17.100 (7.2.2.5	Find the distance between points along
			horizontal and vertical lines of a coordinate
			plane (e.g., what is the distance between (0, 3)
Line Up with Math	NE	MA.7.MA 7.2.2.c	
			Recognize the inverse relationship between the
			size of a unit and the number of units used when
Line Up with Math	NE	MA.7.MA 7.2.5.c	measuring
		Smart Skies	
		2009 Mathemat	ics
		Academic Stand	ards
Nebraska Mathema	tics		
Grade 8			
Activity/Lesson	State	Standards	
			Represent data using circle graphs and box
Fly by Math	NE	MA.8.MA 8.4.1.a	plots with and without the use of technology
			Find, interpret, and compare measures of
			central tendency (mean, median, mode) and the
Fly by Math	NE	MA.8.MA 8.4.1.c	quartiles for sets of data

Fly by Math	NE	MA.8.MA 8.4.1.e	Identify misrepresentation and misinterpretation of data represented in circle graphs and box
i iy by iviatii	IVE	IVI/X.O.IVI/X O.4.1.C	Convert between metric and standard units of
			measurement, given conversion factors (e.g.,
Line Up with Math	NE	MA.8.MA 8.2.5.e	meters to yards)
Line Up with Math	NE	MA.8.MA 8.3.1.c	Identify constant slope from tables and graphs
		Smart Skies	
		2009 Mathemat	ics
		Academic Stand	ards
Nebraska Mathema	tics		
Grades 9-12			
Activity/Lesson	State	Standards	
		MA.9-12.MA	Interpret data represented by the normal
Fly by Math	NE	12.4.1.a	distribution and formulate conclusions
			Compute, identify, and interpret measures of
		MA.9-12.MA	central tendency (mean, median, mode) when
Fly by Math	NE	12.4.1.b	provided a graph or data set
		MA.9-12.MA	Explain how sample size and transformations of
Fly by Math	NE	12.4.1.c	data affect measures of central tendency
E		MA.9-12.MA	Create scatter plots, analyze patterns, and
Fly by Math	NE	12.4.1.f	describe relationships in paired data
			Explain the impact of sampling methods, bias,
		NAA O 40 NAA	and the phrasing of questions asked during data
Ch. last Marth	NIE	MA.9-12.MA	collection and the conclusions that can rightfully
Fly by Math	NE	12.4.1.g	be made
			Use drawings, words, and symbols to explain that the distance between two numbers on the
		MA.9-12.MA	number line is the absolute value of their
Line Up with Math	NE	12.1.2.b	difference
Line op with Math	INE	MA.9-12.MA	unierence
Line Up with Math	NE	12.2.2.c	Apply the distance formula
Line op with Math	INL	MA.9-12.MA	Use strategies to find surface area and volume
Line Up with Math	NE	12.2.5.a	of complex objects
o op mur maur	1 1 1	MA.9-12.MA	Apply appropriate units and scales to solve
Line Up with Math	NE	12.2.5.b	problems involving measurement
Line op with matri	112	MA.9-12.MA	Convert between various units of area and
Line Up with Math	NE	12.2.5.c	volume, such as square feet to square yards
		MA.9-12.MA	Convert equivalent rates (e.g., feet/second to
Line Up with Math	NE	12.2.5.d	miles/hour)
,		MA.9-12.MA	,
Line Up with Math	NE	12.2.5.e	Find arc length and area of sectors of a circle
•			Determine surface area and volume of three-
		MA.9-12.MA	dimensional objects (e.g., spheres, cones,
Line Up with Math	NE	12.2.5.f	pyramids)
•			Know that the effect of a scale factor k on
		MA.9-12.MA	length, area and volume is to multiply each by k,
Line Up with Math	NE	12.2.5.g	k² and k³, respectively

		MA.9-12.MA	Represent, interpret, and analyze functions with graphs, tables, and algebraic notation and convert among these representations (e.g.,
Line Up with Math	NE	12.3.1.a	linear, non-linear)
			Compare and analyze the rate of change by
		MA.9-12.MA	using ordered pairs, tables, graphs, and
Line Up with Math	NE	12.3.1.f	equations
		MA.9-12.MA	Represent, interpret, and analyze functions and
Line Up with Math	NE	12.3.1.h	their inverses